Remarks

Claims 1-30 remain pending. Claim 19 has been amended to correct an obvious typographical error. In view of the amendments and comments below, reconsideration of the present application is respectfully requested.

Applicants' Response to Claim Objection

The Examiner has objected to claim 19 for including a typographical error. Claim 19 has been amended to replace hexamethyldisilizane with hexamethyl disilizane. Therefore, Applicants respectfully submit that this ground of objection has been obviated.

Applicants' Response to Rejection of Claims Under 35 U.S.C. §103

Claims 1-11 and 20-30 have been rejected as allegedly unpatentable over Clark. The Examiner states that it would have been obvious to follow the teachings of Clark to arrive at the present invention. This rejection is respectfully traversed.

Clark provides two distinct methods. One is directed toward a method of degrading plastic materials. The other method is forming mechanical joints, for example, in constructing aircraft frames using thermosetting materials. Although the compositions used for each application incorporate the same types of materials, Clark teaches that the amounts of the materials will vary depending on the application.

When Clark uses an uncured thermosetting plastic material for forming a joint, Clark teaches that only small amounts of microwave absorbable particles are useful. These curable compositions of Clark may be in the form of tapes or strips for adhering upper and lower sheets of material. In this composition, Clark limits the amount of microwave absorbable particles (ferrites in Clark). "The particulate ferromagnetic material may comprise anywhere ***between*** 0.1 to 10 percent by weight of the resulting polymeric composite, and more preferably comprises ***between 1 and 2 weight percent.***" Clark at Column, 4 lines 63-65 (emphasis added). This range is outside the range of the present claims.

The reason that Clark limits the ferrite amount in the curable compositions is shown in figure 3D. Clark demonstrates that although the incorporation of ferrite particles provides an increase in lap shear strength when used up to about 0.66% compared to the composition without ferrite, the incorporation of greater amounts of ferrite particles decreases the lap shear strength. Considering that these curable compositions are used in the preparation of aircraft joints, one of skill in the art will recognize the disadvantage of decreasing the strength in the bond and the importance of the structural integrity of aircraft part. Therefore, since the incorporation of greater than 0.66 weight percent of ferrite particles results in a decreased strength of the bond, one of skill in the art would not prepare a curable composition with greater than 0.66%. Following the teachings of Clark, a joint prepared with a composition including greater than 0.66% would have an increased risk of failure.

Not only does Clark fail to teach a composition including microwave absorbable particles in an amount greater than 10% by weight, Clark also fails to teach the use of microwave absorbable particles having a Curie temperature at or above the cure temperature of a heat curable resin component and below the degradation temperature of the heat curable resin component.

In addition to providing a curable composition as described above, Clark also teaches a plastic degradation method. Although the amount of ferrite particles which are included in this method are apparently not as critical, Clark still fails to meet the limitation of the present claims where the microwave absorbable particles are selected based on their Curie temperature, which must be below the degradation of the temperature of the resin component. Since Clark is directed specifically to the degradation of the plastics, Clark provides no motivation to include a microwave absorbable particle having a Curie temperature below the degradation temperature, since degradation is the desired outcome.

Both embodiments of Clark, the curable composition and the plastic degradation composition not only fail to disclose use of a microwave absorbable particle in an amount above 10% by weight and the use of a microwave absorbable particle having a Curie temperature below

the degradation temperature of the composition, but also teach away from each of these limitations which are set forth in Claim 1. Therefore, reconsideration and withdrawal of the rejections under Section 103 are appropriate and respectfully requested.

In view of the above amendments and remarks, Applicants respectfully submit that the present application, including claims 1-30 is now in condition for allowance. Favorable action thereon is respectfully requested.

Should the Examiner have any questions with respect to the above amendments and remarks, the Examiner is respectfully requested to contact Applicants' undersigned counsel at the telephone number below.

Respectfully submitted,

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